

## Compelling Questions

## Science Goals:

	<u>IAA Study (includes human exploration)</u>	<u>SSS White Paper Draft</u>	<u>SSE 2003 (w/o Mars)</u>	<u>Decadal Report</u>
<b>How did we get here?</b>	<p>Determine how the universe of stars and planets began and evolved</p> <p>Determine the origin and evolution of Earth and its biosphere</p>	<p>Learn how the sun's family of planets and minor bodies originated</p> <p>Determine how the solar system evolved to its current diverse state</p>	<p>Learn how the sun's family of planets and minor bodies originated</p> <p>Determine how the solar system evolved to its current diverse state</p> <p>Determine the characteristics of the solar system that led to the origin of life</p>	<p>Learn how the sun's retinue of planets and minor bodies originated and evolved</p> <p>Discover how the simple, basic laws of physics and chemistry can lead to the diverse phenomena observed in complex systems</p> <p>Understand how physical and chemical processes determine the main characteristics of solar system bodies and their environments, thereby illuminating the workings of Earth</p>
<b>Where are we going?</b>	<p>Determine the nature of the space environment and cosmic hazards to Earth</p> <p>Determine the potential for permanent human presence in space</p>	<p>Explore the space environment to discover hazards and resources for life</p>	<p>Explore the space environment to discover hazards to Earth</p>	<p>Explore the terrestrial space environment to discover what potential hazards to Earth may exist</p>
<b>Are we alone?</b>	<p>Determine if there is or ever has been other life in the solar system</p> <p>Determine if there are life-bearing planets around other stars</p>	<p>Understand the origin and ubiquity of life</p>	<p>Understand how life begins and evolves</p>	<p>Determine if environments capable of sustaining life exist or have ever existed beyond Earth, what parameters constrain its occurrence, how life developed in the solar system, whether life exists or may have existed beyond Earth, and in what ways life mod</p>

### **Compelling Questions**

### **Presidents Policy**

### **Science Goals**

Conduct robotic exploration across the solar system for scientific purposes and to support human exploration. In particular...

**How did we get here?** ...to understand the history of the solar system,...

Learn how the sun's family of planets and minor bodies originated

Determine how the solar system evolved to its current diverse state including the origin and evolution of the Earth's biosphere

**Where are we going?** ...to search for resources, ...

Explore the space environment to discover potential hazards to Earth

Explore for resources available in space to enable a permanent human presence

**Are we alone?** ...to search for evidence of life, ..."

Determine if there is or ever has been other life in the solar system